REBUTTAL TESTIMONY OF
JOHN H. RAFTERY
ON BEHALF OF
DOMINION ENERGY SOUTH CAROLINA, INC.
DOCKET NO. 2019-184-E

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is John Raftery and my business address is 220 Operation Way, Cayce, South Carolina.

Q. ARE YOU THE SAME JOHN RAFTERY THAT OFFERED DIRECT TESTIMONY IN THIS DOCKET?

A. Yes, I am.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my rebuttal testimony is to discuss the response of Dominion Energy South Carolina, Inc. ("DESC" or the "Company") to certain issues raised in 1) the direct testimony of Mr. Brian Horii filed on behalf of the South Carolina Office of Regulatory Staff ("ORS"); 2) the direct testimony of Mr. Derek Stenclik filed on behalf of the South Carolina Coastal Conservation League and the Southern Alliance for Clean Energy; 3) the direct testimony of Ms. Rebecca Chilton filed on behalf of Johnson Development Associates, Inc.; 4) the direct testimony of Mr. Hamilton Davis filed on behalf of the South Carolina Solar Business Alliance ("SCSBA"); 5) and the direct testimony of Mr. Ed Burgess filed on behalf of SCSBA.

REBUTTAL TO TESTIMONY OF MR. BRIAN HORII

Q. WITH RESPECT TO MR. HORII'S TESTIMONY, PLEASE EXPLAIN HOW YOU ORGANIZE YOUR RESPONSES.

A. My rebuttal testimony sequentially addresses certain issues raised by Mr. Horii as they appear in his direct testimony.

Q. ON PAGE 23, LINE 11 THROUGH PAGE 24, LINE 13, MR. HORII RECOMMENDS THAT DESC BE REQUIRED TO UPDATE THEIR STANDARD OFFER FOR FUTURE CHANGES IN THE VARIABLE INTEGRATION CHARGE AND THAT, AS PART OF THESE UPDATES, THE COMPANY ALSO SHOULD BE REQUIRED TO CONDUCT TECHNICAL WORKSHOPS TO GAIN INPUT FROM THE SOLAR COMMUNITY AND OTHER STAKEHOLDERS REGARDING THESE FUTURE VARIABLE INTEGRATION CHARGE UPDATES. WHAT IS YOUR RESPONSE?

A. DESC is agreeable to conducting technical workshops with respect to future changes in the variable integration charge, but believes that those workshops should be conducted in conjunction with the Integration Study authorized by Act No. 62.

In this way, the technical workshops regarding the integration charge can contribute to the integration study and provide stakeholder input that the Commission can use to evaluate issues raised in the study.

<u>REBUTTAL TO TESTIMONY OF MR. DEREK STENCLIK</u>

Q. WITH RESPECT TO MR. STENCLIK'S TESTIMONY, PLEASE EXPLAIN HOW YOU ORGANIZE YOUR RESPONSES.

A. In the same manner I previously responded to the testimony of certain other parties' witnesses, my rebuttal testimony sequentially addresses certain issues raised by Mr. Stenclik as they appear in his direct testimony.

Q. ON PAGE 6, LINES 8 THROUGH 17, MR. STENCLIK STATES THAT DESC HAS NOT PROPERLY CONSIDERED THE AVAILABILITY OF EXISTING AND NEW DEMAND RESPONSE RESOURCES IN ITS ANALYSIS OF AVOIDED COSTS. HOW DO YOU RESPOND TO THIS?

A. I disagree. Although Company Witness Tanner will provide additional testimony regarding Mr. Stenclik's assertion, I want to note that the Company has conducted an extensive investigation into the possibility of relying on additional demand response programs to reduce peak demand. Specifically, in Commission Docket No. 2019-239-E, DESC has filed a comprehensive potential study and demand side management ("DSM") program analysis. That study and analysis determined that, absent sufficient saturation of Advanced Metering Infrastructure

(“AMI”) on DESC’s system, no new demand response programs would be cost effective over the five-year planning timescale used for program planning. The study determined that there are no new cost-effective programs that the Company can add that will assist to mitigate the winter peak.

The study has been presented for review by the Commission, ORS and other interested parties in Docket No. 2019-239-E. It was prepared with extensive stakeholder input by ICF International, a third-party consulting group with national standing in the evaluation of energy efficiency and demand side management (“DSM”) programs. The Commission has reviewed and accepted ICF’s work in multiple DSM proceedings since 2008. For purposes of this proceeding, the study and the testimony supporting it in Docket No. 2019-239-E provide clear evidence that, contrary to Mr. Stenclik’s assertions, the Company has in fact considered and evaluated potential and existing demand side management resources and determined that they are not cost-effective to reduce peaks at this time. To the extent that additional DSM programs do become cost effective for reducing peak demands, they would serve to reduce the need for additional capacity on DESC’s system and could also make the electrical system more fuel efficient to operate across peaks. As a result, they could very well reduce the value of solar generation and solar generating capacity and lower, not raise, avoided costs values as Mr. Stenclik seems to suggest.

<u>REBUTTAL TO TESTIMONY OF MS. REBECCA CHILTON</u>

Q. WITH RESPECT TO MS. CHILTON'S TESTIMONY, PLEASE EXPLAIN HOW YOU ORGANIZE YOUR RESPONSES.

A. In the same manner I previously responded to the testimony of certain other parties' witnesses, my rebuttal testimony sequentially addresses certain issues raised by Ms. Chilton as they appear in her direct testimony.

Q. ON PAGE 4, LINES 1 THROUGH 23, MS. CHILTON SUGGESTS THAT ONE OF THE PURPOSES OF PURPA IS SO THAT PPAs DO NOT DISCRIMINATE AGAINST QFs IN COMPETING TO PROVIDE GENERATION AND TO ALLOW THEM TO COMPETE ON EVEN TERMS WITH UTILITIES. WHAT IS YOUR UNDERSTANDING OF THE PURPOSE OF ACT NO. 62, WHICH INCORPORATES PURPA?

A. As I stated in my direct testimony, the purpose of Act No. 62, which incorporates PURPA by reference, states that "[a]ny decisions by the commission shall be just and reasonable to the ratepayers of the electrical utility, in the public interest, consistent with PURPA and the Federal Energy Regulatory Commission's implementing regulations and orders, and nondiscriminatory to small power producers; and shall strive to reduce the risk placed on the using and consuming public." Thus, the purpose of Act 62 is not to increase competition but, as I stated on Page 6, Lines 19 through 21 of my Direct Testimony, to ensure that "the development of renewable energy resources, such as solar generation, proceeds in a manner that is fair and balanced to all customers of all programs related to renewable energy and energy storage." By setting avoided costs on a fair and objective basis, the Commission will fulfill PURPA's legislative intent of fostering energy conservation through the development of renewable energy resources. At the same time, it will fulfill the clear legislative mandate of Act No. 62 that compensation paid for solar generation must not shift costs to customers.

Given the importance of customers' interests in this matter, it is not surprising that the General Assembly requires the Commission in very clear terms to protect customers from paying more for QF generation than the objectively verifiable costs that the electrical system avoids because of that generation. Artificially manipulating avoided cost calculations to make solar projects competitive with other sources of generation supply would be contrary to the terms of Act No. 62. Under both PURPA and Act No. 62, there are two primary considerations in determining the price paid for QF power (1) the objectively verifiable economics of operating the utility's electrical system, and (2) the net reduction in the incremental cost of operating that system that results from adding QF power to it. To price that power based on other considerations is likely either to undercompensate solar developers for the value of the resource they provide or to shift costs from solar developers onto customers, both of which are expressly prohibited.

Q. ON PAGE 9, LINE 15 THROUGH PAGE 10, LINE 7, MS. CHILTON STATES THAT "DOMINION ENERGY STILL HAS A WAY TO GO TOWARDS EQUITABLY AND EFFICIENTLY ADOPTING RENEWABLE ENERGY, BUT IT HAS MADE GREAT PROGRESS WHICH SHOULD INFORM ALL OF THE UNITS IN ITS CORPORATE FAMILY, INCLUDING DESC." HOW DO YOU RESPOND TO THAT?

A. Ms. Chilton suggests that DESC has been sluggish in adopting renewable energy programs, when nothing could be further from the truth. As I testified on Page 13, Line 14 through Page 15, Line 15 of my Direct Testimony:

> According to the Smart Electric Power Alliance ("SEPA"), of 494 utilities across the United States, DESC installed the 11th highest amount of solar in 2018, ranking only behind Pacific Gas & Electric (California), Florida Power & Light Co. (Florida), Southern California Edison (California), Duke Energy Progress (North Carolina), Xcel Energy (Minnesota), Dominion Energy North Carolina (North Carolina), Austin Energy (Texas), San Diego Gas & Electric (California), Tampa Electric Company (Florida), and Georgetown Utility Systems (Texas). Equally impressive, the amount of solar that DESC has interconnected as of July 31, 2019, is over 598 MW, or approximately 14% of its 2014-2018 five-year average retail peak demand (4,291 MW). DESC also has another 475 MW under contract and to be installed by the end of 2021, which will put the Company over 25% of its 2014-2018 five-year average retail peak demand.
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> In addition, according to the Energy Information Administration's Form EIA-861, through 2018, the state of South Carolina has more net energy metering installations than the combined total of North Carolina, Georgia, Kentucky, Tennessee, Alabama, and Mississippi (115 MW). In fact, with approximately 172 MW of net energy metering installations as of December 31, 2018, South Carolina has almost twice as much as North Carolina's 89 MW of installations.

Thus, DESC in fact has an admirable record with respect to renewable energy resources, especially when compared to other electric utilities in the Southeast and in the nation.

<u>REBUTTAL TO TESTIMONY OF MR. HAMILTON DAVIS</u>

Q. WITH RESPECT TO MR. DAVIS' TESTIMONY, PLEASE EXPLAIN HOW YOU ORGANIZE YOUR RESPONSES.

A. In the same manner I previously responded to the testimony of certain other parties' witnesses, my rebuttal testimony sequentially addresses certain issues raised by Mr. Davis as they appear in his direct testimony.

Q. ON PAGE 4, LINE 10 THROUGH PAGE 5, LINE 4, MR. DAVIS DISCUSSES THE OVERARCHING GOALS OF ACT NO. 62. DO YOU AGREE WITH HIS TESTIMONY?

A. No. As I explained above, while Act No. 62 has a number of provisions that provide a process by which independent power producers are compensated for their energy production, electric utility customers are neither required to subsidize the development of these renewable resources nor assume the risk associated with them. Accordingly, Act No. 62 requires the Company to calculate its costs and establish its rates at just and reasonable levels so as to fairly compensate the independent power producers for the value of the resource they provide without unfairly or unnecessarily shifting costs or risks on to the Company's customers.

Q. ON PAGE 5, LINE 21 THROUGH PAGE 6, LINE 7, MR. DAVIS STATES THAT ACT NO. 62 IS A SHIFT AWAY FROM A "BUSINESS AS USUAL" REGULATORY APPROACH. DO YOU AGREE?

A. No. Mr. Davis is not entirely clear as to what he means by "business as usual." However, he is clearly mistaken if he means to suggest DESC has not been successful in working with solar developers to bring economically viable renewable generation projects to market. As explained in my Direct Testimony, DESC has been exceptionally successful in bringing new solar generation onto its system. DESC is a leader in the electric utility industry in the incorporation of renewable energy programs into its generation portfolio. In fact, DESC has so much solar generation currently available on its system that, as explained in the Direct Testimony of the Company's witnesses, it presently does not derive a capacity benefit from additional solar generation.

DESC has purposely and effectively incorporated solar generation into its portfolio of generation resources in compliance with PURPA. DESC has done so in a way that provides solar developers with the full benefit of the costs they allow the system to avoid. By requiring fairness for all parties, incorporating PURPA standards and continuing avoided cost protections for electric customers, Act No. 62 simply extends and clarifies the process that DESC already has implemented to achieve remarkable growth in solar generation while not burdening customers with rates that unfairly subsidize solar developers. If those are the practices that define "business as usual" in Mr. Davis' mind, then the mandates in Act No. 62 would appear to be entirely consistent with them.

If by saying that the General Assembly has decided to shift away from "business as usual," Mr. Davis means that the South Carolina General Assembly decided to abandon its policy of protecting customers from subsidizing solar developers through rates that exceed the true costs avoided on the utility's system, then the language of the Act clearly contradicts this assertion. The Act is very clear that rates to solar developers may not exceed the costs that such generation allows the electrical system to avoid. That is the critical customer protection that Act No. 62 insists must be maintained.

Q. ON PAGE 7, LINES 18 THROUGH 20, MR. DAVIS STATES THAT THE "RISKS TO RATEPAYERS ARE NOT LIMITED TO INACCURATE AVOIDED ENERGY RATES AND EXTEND TO UTILITY DEVELOPMENT AND OWNERSHIP OF OTHER GENERATING RESOURCES, AGAINST WHICH SPPs PROVIDE A SIGNIFICANT RISK HEDGE." HOW DO YOU RESPOND TO THIS STATEMENT?

A. Mr. Davis's unstated assumption is that adding solar generation will displace capacity that DESC would otherwise add to its system to serve customers reliably. This is simply not the case. DESC makes the decision to build additional resources when its existing resources do not provide sufficient capacity to reliably meet customers' peak demands. It is a fact of how our system operates, not a matter of opinion, that solar resources do not generate power in the early morning hours when winter peaks occur and so do not provide capacity to meet winter peak needs. Likewise, it is a fact of system planning that adding solar resources will not change DESC's capacity needs because these resources do not add to the capacity that will be available to meet winter peaks. Therefore, it is also a fact that if DESC pays solar developers for "avoided capacity costs," it will pay for capacity costs that in fact are not avoided. And, importantly, it is a fact of rate making that if DESC pays solar developers for "avoided capacity costs," it will have to pay a second time to provide the capacity needed to meet winter peaks, and customers will pay for capacity twice. That outcome is inconsistent with the intent underlying Act No. 62.

As a general matter, important protections are in place to ensure that DESC's customers do not face the risk of unnecessary or non-economical capacity resources being added to the system. The Utility Facility Siting and Environmental Protection Act, S.C. Code Ann. §§ 58-33-10, et seq. (the "Siting Act"), protects ratepayers with respect to the addition of new generation facilities. The Siting Act requires electric utilities to obtain Commission approval and receive a Certificate of Environmental Compatibility and Public Convenience and Necessity before adding an electric generating plant with a capacity exceeding 75 MW. Thus, ratepayers are protected with respect to the addition of major utility facilities through the oversight of this Commission. The availability of solar power producers as a further hedge against this purported risk is not necessary and, moreover, is not part of the purpose of PURPA or Act No. 62.

I further note that, in Section 2.A of the Settlement Agreement entered into between Dominion Energy, Inc., SCE&G (now DESC), and the South Carolina Solar Business Alliance in the 2017 merger docket, DESC agreed not to "procure or apply to certify a new generating resource with a nameplate capacity of more than 75 megawatts without first conducting a competitive, all-source solicitation ("RFP")." DESC and the SCSBA further agreed in Section 2.A that the term "all source" includes "distributed resources, aggregated resources, and renewable resources, at a minimum." Section 2.B. of the Settlement Agreement also requires that an Independent Evaluator will evaluate the bidding process and "report to the Commission regarding the transparency, completeness, and integrity of the bidding process and the evaluation of bids." I also note that Section 3.A.ii of the Settlement Agreement requires DESC "[d]uring calendar year 2019 [to] file for Commission approval proposed avoided costs rates for energy and capacity that provide accurate pricing for storage as a separate resource; or file for Commission approval proposed technology-neutral avoided cost rates for energy and capacity that provide accurate pricing for dispatchable renewable generating facilities such as solar + storage (e.g., hourly pricing)." Such storage programs are not presently available but the Company will nonetheless make a filing with the Commission on or before December 31, 2019, that complies with the terms of the Settlement Agreement and that will provide a basis for considering options with respect to the Company's present and future generation and peaking requirements.

In short, based on the provisions of the Settlement Agreement that the SCSBA itself agreed to, there is no risk that DESC will add large capacity plants to its base load to the exclusion of renewable resources without the consideration of renewable energy resources as options to meet its generation and peaking needs.

Q. ON PAGE 15, LINES 16 THROUGH 18, MR. DAVIS STATES THAT "UTILITIES MAKE A RETURN FOR SHAREHOLDERS BY INVESTING IN NEW GENERATION, POLLUTION CONTROL TECHNOLGIES, AND GRID-RELATED IMPROVEMENTS, WHICH RESULTS IN A CAPITAL BIAS BY UTILITIES TO SPEND THEIR OWN MONEY TO MEET CUSTOMER NEEDS." HOW DO YOU RESPOND?

A. Mr. Davis suggests that the Company will set avoided costs at a low level because it has a bias toward adding capital intensive facilities whenever possible so as to increase the return to shareholders. Mr. Davis's unstated assumption is that additional solar generation will displace capacity that DESC would otherwise add to its system to be able to serve customers reliably. This is simply not the case. Solar does not contribute to meeting DESC's peak capacity requirements. Furthermore, as discussed above, if new capacity is required, renewable power generators will have the opportunity to bid for the provision of that capacity. On the other hand, and in stark contrast to the regulatory protections that customers have against DESC constructing unneeded facilities, solar providers have an unregulated price incentive to seek the highest possible avoided costs in order to maximize their own returns for their investors.

I further note that pollution control technologies and grid-related improvements expenditures are made for purposes of system reliability, environmental needs, and customer service, and not simply for the purpose of generating a return to investors. And, again, the installation and use of these types of capital expenditures are subject to review and approval by this Commission.

Q. ON PAGE 17, LINES 19 THROUGH 21, MR. DAVIS STATES THAT YOU "CLAIM[ ] THAT DOMINION IS NOT INCENTIVIZED TO UNDERSTATE AVOIDED COSTS, WHICH IS DEMONSTRABLY FALSE AS EVIDENCED ABOVE." HOW DO YOU RESPOND TO THAT STATEMENT?

A. It appears that Mr. Davis does not understand my testimony or the Siting Act and is unfamiliar with the Settlement Agreement. He also erroneously states on Page 17, Lines 8 through 10, that DESC "is incentivized to keep avoided cost rates as low as possible, since low avoided cost rates may render QFs economically infeasible, reducing direct competition with the utility." There are several problems with Mr. Davis's assertions. First, as I have explained above, the Company's interests are consistent with Act No. 62 and PURPA: ensuring that avoided costs are set appropriately so that customers are economically indifferent to the choice of energy resources. Second, it is impossible for DESC to reduce competition with solar providers by keeping avoided costs low. Assuming that solar providers cannot meet DESC's generation needs because the avoided costs hypothetically are set too low, it will become necessary for DESC to add more generation. That in turn will require DESC to conduct a competitive all-source solicitation pursuant to the Settlement Agreement, which requires consideration of renewable resources and subjects the process to the review of an Independent Evaluator, and also will require Commission approval pursuant to the Siting Act. Third, as I discuss above, the Company's avoided costs as set forth here reflect its true generation and peaking needs given the needs and operating realities of its system. In contrast, solar developers have an incentive for avoided costs to be set as high as possible in order to maximize their unregulated returns.

REBUTTAL TO TESTIMONY OF MR. ED BURGESS

Q. WITH RESPECT TO MR. BURGESS' TESTIMONY, PLEASE EXPLAIN HOW YOU ORGANIZE YOUR RESPONSES.

A. In the same manner I previously responded to the testimony of certain other parties' witnesses, my rebuttal testimony sequentially addresses certain issues raised by Mr. Burgess as they appear in his direct testimony.

Q. ON PAGE 6, LINE 15 THROUGH PAGE 7, LINE 6 MR. BURGESS SUGGESTS THAT UTILITIES HAVE AN UNDERLYING FINANCIAL INCENTIVE TO MAKE CHOICES THAT RESULT IN LOWER AVOIDED COST CALCULATIONS. DO YOU AGREE?

A. No. As I indicated above in response to similar assertions by Mr. Davis, it is the Company's obligation to establish an avoided cost amount that accurately reflects the Company's generation and peaking needs. In direct contrast, solar developers have an incentive to establish artificially high avoided costs in order to maximize their own return.

Q. ON PAGE 7, LINE 7 THROUGH PAGE 8, LINE 8, MR. BURGESS STATES THAT DESC IS INCENTIVIZED TO OWN ITS OWN SOURCES OF GENERATION BECAUSE THEY EARN AN AUTHORIZED RATE OF RETURN ON INVESTED CAPITAL IN RATE BASE. WHAT IS YOUR RESPONSE TO THIS SUGGESTION?

A. Again, the Company's obligation is to ensure that the calculated avoided costs reflect the Company's generation and peaking needs. The Siting Act and the Settlement Agreement ensure that any addition of physical generation plants is prudent and necessary and is not done without considering whether available renewable energy resources may efficiently provide the needed capacity.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.